

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 1-16 without prejudice or disclaimer.

Please ADD new claims 17-36

1-16. (CANCELLED)

17. (NEW) A central processing unit comprising:

an input unit that inputs a command that can be executed by using a firmware or a logic circuit;

a storing unit that stores a plurality of operation modes, each one of the operation modes corresponding to a different set of commands that are available when the each one of the operation modes is set;

a determining unit that determines whether the input command is included or not in the set of commands corresponding to a current operation mode; and

a execution unit that executes the input command by using the firmware or the logic circuit, when the input command is included in the set of commands corresponding to the current operation mode.

18. (NEW) The central processing unit according to claim 17, wherein

the input unit inputs an operation mode adding command for storing a new operation mode in the storing unit; and

the execution unit makes the storing unit store the new operation mode, when the operation mode adding command is included in the set of commands corresponding to the current operation mode.

19. (NEW) The central processing unit according to claim 18, wherein the execution

unit makes the storing unit store the new operation mode only when a number of commands corresponding to the new operation mode is greater than a number of commands corresponding to any one of the operation modes stored in the storing unit.

20. (NEW) The central processing unit according to claim 17, wherein the input unit inputs a firmware acquiring command for acquiring a new firmware that is used to execute a command, and

the execution unit acquires the new firmware from outside, when the firmware acquiring command is included in the set of commands corresponding to the current operation mode.

21. (NEW) The central processing unit according to claim 20, wherein the executing unit acquires an encrypted firmware and decrypts the encrypted firmware.

22. (NEW) The central processing unit according to claim 20, wherein the execution unit acquires a digitally signed firmware and authenticates the firmware.

23. (NEW) The central processing unit according to claim 17, wherein the execution unit includes an access control unit that controls access to resources according to the current operation mode, and the resources are required during execution of the input command.

24. (NEW) The central processing unit according to claim 17, further comprising: an operation mode deleting unit that deletes a specified operation mode from the storing unit; and

a firmware deleting unit that deletes a firmware corresponding to the operation mode deleted.

25. (NEW) The central processing unit according to claim 17, further comprising an execution request unit that requests an external emulator to execute the input command, when the input command is not included in the set of commands corresponding to the current operation mode.

26. (NEW) The central processing unit according to claim 17, wherein the input unit inputs a logic circuit data acquiring command for acquiring a logic circuit data to generate a new logic circuit that is used to execute a command, and

the execution unit acquires the logic circuit data from outside, when the logic circuit data acquiring command is included in the set of commands corresponding to the current operation mode, and generates the new logic circuit based on the logic circuit data acquired.

27. (NEW) A method for managing a plurality of operating modes comprising:
inputting a command that can be executed by using a firmware or a logic circuit;
determining whether the input command is included or not in a set of commands
corresponding to a current operation mode, where each one of the operation modes
corresponds to a different set of commands that are available when the each one of the
operation modes is set; and
executing the input command by using the firmware or the logic circuit, when the input
command is included in the set of commands corresponding to the current operation mode.

28. (NEW) A computer-readable recording medium that stores a computer program
for managing a plurality of operating modes, the computer program making a computer execute:
inputting a command that can be executed by using a firmware or a logic circuit;
determining whether the input command is included or not in a set of commands
corresponding to a current operation mode, where each one of the operation modes
corresponds to a different set of commands that are available when the each one of the
operation modes is set; and
executing the input command by using the firmware or the logic circuit, when the input
command is included in the set of commands corresponding to the current operation mode.

29. (NEW) The computer-readable recording medium according to claim 28, wherein
the inputting includes inputting an operation mode adding command for storing a new
operating mode in a storing unit that stores the operation modes, and
the executing includes making the storing unit store the new operation mode when the
operation mode adding command is included in the set of commands corresponding to the
current operation mode.

30. (NEW) The computer-readable recording medium according to claim 29, wherein
the executing includes making the storing unit store the new operation mode, only when a
number of commands corresponding to the new operation mode is greater than a number of
commands corresponding to any one of the operation modes stored in the storing unit.

31. (NEW) The computer-readable recording medium according to claim 28, wherein
the inputting includes inputting an firmware acquiring command for acquiring a new

firmware that is used to execute a command, and

the executing includes acquiring the new firmware from outside, when the firmware acquiring command is included in the set of commands corresponding to the current operation mode.

32. (NEW) The computer-readable recording medium according to claim 31, wherein the executing includes acquiring an encrypted firmware and decrypting the encrypted firmware.

33. (NEW) The computer-readable recording medium according to claim 31, wherein the executing includes acquiring a digitally signed firmware and authenticating the firmware.

34. (NEW) The computer-readable recording medium according to claim 28, wherein the executing includes controlling access to resources according to the current operation mode, the resources being required during execution of the input command.

35. (NEW) The computer-readable recording medium according to claim 28, the computer program further makes the computer execute:

deleting a specified operation mode from a storing unit that stores the operation modes;
and

deleting a firmware corresponding to the operation mode deleted.

36. (NEW) The computer-readable recording medium according to claim 28, the computer program further makes the computer execute requesting an external emulator to execute the input command, when the input command is not included in the set of commands corresponding to the current operation mode.